

ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC

In the matter of)
)
Interconnection Between Local Exchange)
Carriers and Commercial Mobile Radio)
Service Providers)
)
Equal Access and Interconnection)
Obligations Pertaining to Commercial)
Mobile Radio Service Providers)

CC Docket No. 95-185

DOCKET FILE COPY ORIGINAL

RECEIVED

MAR - 4 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

BELL ATLANTIC

Introduction & Summary

Bell Atlantic¹ respectfully submits these comments in response to the Commission's January 11, 1996 Notice of Proposed Rulemaking ("NPRM").² Bell Atlantic opposes the Commission's proposal to mandate "bill & keep" interconnection arrangements between local exchange carriers ("LECs") and Commercial Mobile Radio Service ("CMRS") providers because it is contrary to the new telecommunications

¹ The Bell Atlantic telephone companies ("Bell Atlantic") are Bell Atlantic-Delaware, Inc.; Bell Atlantic-Maryland, Inc.; Bell Atlantic-New Jersey, Inc.; Bell Atlantic-Pennsylvania, Inc.; Bell Atlantic-Virginia, Inc.; Bell Atlantic-Washington, D.C., Inc.; and Bell Atlantic-West Virginia, Inc.

² Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers; Equal Access and Interconnection Obligations Pertaining to Commercial Mobile Radio Service Providers, CC Docket No. 95-185, NPRM (rel. Jan. 11, 1996).

No. of Copies rec'd
List ABCDE

019

legislation, violates fundamental economic principles, and represents an unjustified departure from current Commission policies and interconnection arrangements.

Any attempt by the Commission to prescribe “bill & keep” or any other specific form of interconnection arrangement between LECs and CMRS providers would be contrary to the Telecommunications Act of 1996 (“Act”). The Act requires LECs to negotiate interconnection arrangements and agreements with telecommunications carriers (which includes CMRS providers) and to submit them to state commissions for approval. It does not authorize the Commission to prescribe specific interconnection arrangements for telecommunications carriers. The new interconnection paradigm established by the Act will inevitably change existing LEC-CMRS interconnection arrangements.

Mandating “bill & keep” interconnection arrangements would also violate fundamental economic principles and basic property rights. Forcing local exchange carriers to complete broadband CMRS calls at no charge would be economically inefficient and would distort both purchasing and investment decisions. It would also be an unlawful taking if the LECs were not appropriately compensated.

In any event, the Commission’s proposal to implement “bill & keep” even on an interim basis is a solution in search of a problem. The cellular industry has grown at phenomenal rates under current interconnection arrangements, far outstripping the growth rate of landline telephone service. Moreover, the interconnection rates paid by cellular carriers are an insignificant fraction of their retail rates and therefore have no bearing on their ability to compete with wireline local exchange service.

There is therefore no reason for the Commission to continue this docket. The issues raised in the NPRM are either addressed by the Act or should be addressed in the broader interconnection rulemaking mandated by the Act.

I. THE COMMISSION’S PROPOSAL TO MANDATE “BILL & KEEP” INTERCONNECTION ARRANGEMENTS BETWEEN LECs AND CMRS PROVIDERS IS CONTRARY TO THE TELECOMMUNICATIONS ACT OF 1996

The Telecommunications Act of 1996 establishes a comprehensive legislative scheme of negotiated interconnection arrangements between LECs and telecommunications carriers that are subject to state commission approval. This new scheme contemplates good faith negotiation of publicly available interconnection agreements that provide for the mutual and reciprocal recovery by each carrier of the costs associated with the transport and termination of each other’s calls and do not discriminate against broadband CMRS providers. The Commission’s proposal to mandate the terms and conditions for interconnection arrangements between LECs and CMRS providers is wholly inconsistent with the Act.

Section 251 imposes duties on telecommunications carriers and LECs. They include “[t]he duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier’s network . . . for the transmission and routing of telephone exchange service and exchange access”³

³ Section 251(c)(2)(A).

and “[t]he duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications.”⁴

The Act requires establishment of these interconnection and reciprocal compensation arrangements through negotiated agreements. It imposes “[t]he duty to negotiate in good faith in accordance with Section 252 the particular terms and conditions of agreements to fulfill the duties described in [Sections 251(b) & (c)].”⁵ During these negotiations, any party may ask a state commission to mediate the negotiations or arbitrate any open issues.⁶

These agreements are then subject to state commission review and approval under the non-discrimination and public interest standards set forth in the Act.⁷ Each approved agreement must be publicly available within 10 days.⁸ If a state commission fails to carry out its responsibilities under the Act, the FCC may preempt the state commission’s jurisdiction and assume its responsibilities under the Act.⁹ Any party aggrieved by a state commission’s action may challenge it before the federal district court.¹⁰

⁴ Section 251(b)(5).

⁵ Section 251(c)(1).

⁶ Section 252(a) & (b).

⁷ Section 252(e)(1).

⁸ Section 252(h).

⁹ Section 252(e)(5).

¹⁰ Section 252(e)(6).

There are at least three reasons why the Commission's proposal to require "bill & keep" interconnection arrangements is inconsistent with the Act. First, by mandating the terms and conditions for all interconnection arrangements between LECs and CMRS providers, the Commission would virtually eliminate the opportunity for negotiation of interconnection and reciprocal compensation arrangements. In order to give effect to the legislative scheme of negotiated agreements, LECs and CMRS providers cannot be constrained by a Commission-prescribed arrangement.

Second, by prescribing LEC-CMRS interconnection arrangements, the FCC would be usurping the authority Congress gave to the states. Under the Act, state commissions have jurisdiction to review and approve **all** interconnection agreements negotiated under Section 251.¹¹ The Commission may act on interconnection agreements only where a state has failed to carry out its statutory responsibilities.¹² If the FCC were to prescribe a single interconnection arrangement, it would effectively nullify the state commissions' responsibilities.

Finally, a mandatory "bill & keep" arrangement would violate the statutory criteria for evaluating interconnection arrangements. The Act provides that "a State commission shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless . . . such terms and conditions provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination

¹¹ Section 252(e)(1).

¹² Section 252 (e)(5). The Commission has the authority and responsibility to promulgate regulations that implement the statutory requirements. Section 251(d)(1).

on each carrier's network facilities of calls that originate on the network facilities of the other carrier"¹³ The Commission's "bill & keep" proposal would not allow either network to recover its costs because it would set the rate for terminating traffic at zero. A state commission therefore cannot approve a "bill & keep" interconnection arrangement unless the parties to the agreement "waive mutual recovery"¹⁴ A mandated "bill & keep" interconnection arrangement obviously lacks the requisite voluntary waiver of the parties.

Given the new legislative scheme, the Commission should not -- and, indeed, cannot -- mandate "bill & keep" interconnection arrangements for any telecommunications carriers. The Commission should therefore close this docket without further action and open a new proceeding to promulgate regulations implementing the Act.

II. MANDATORY "BILL & KEEP" IS AN UNSOUND INTERCONNECTION ARRANGEMENT

A. "Bill & Keep" Violates Fundamental Economic Principles

One of the fundamental principles of economics is that prices should be set no lower than the cost of producing the service. This principle assures that consumers do not purchase services where the benefit is less than the cost to society of producing them. The Commission acknowledged this principle in its NPRM: "With consumers receiving

¹³ Section 252(d)(2)(A). The Act further provides that such costs should be determined on the basis of a reasonable approximation of the additional costs of terminating such calls. Section 252(d)(2)(B).

¹⁴ Section 252(d)(2)(B)(i).

cost-based pricing signals, they purchase communications goods and services only when they receive value greater than or equal to the cost of producing them.”¹⁵

As explained in the attached statement, the Commission’s “bill & keep” proposal violates this economic principle. It sets the interconnection rate at zero, which is clearly below the relevant long run incremental cost.¹⁶ It therefore encourages the completion of calls where the cost exceeds the benefit.¹⁷ It also creates artificial incentives to avoid customers that have a disproportionate share of in-bound calls and to pursue customers with a large share of out-bound calls.¹⁸

The Commission’s “bill & keep” proposal would also distort efficient investment decisions. As the Commission correctly noted, “if interconnection is available at an unreasonably low price, service providers that otherwise may have built their own facilities to serve part of a LEC’s service territory in competition with the LEC may decline to do so.”¹⁹ Yet this is precisely what the Commission’s “bill & keep” proposal would do by forcing LECs to price their interconnection services at zero, well below their cost.²⁰ Competitors would have an artificial disincentive to invest in switching capacity

¹⁵ NPRM at ¶ 4.

¹⁶ Statement of Robert W. Crandall at 7-8 (March 4, 1996) (copy attached).

¹⁷ Crandall Statement at 8.

¹⁸ Crandall Statement at 8-9.

¹⁹ NPRM at ¶ 10.

²⁰ Crandall Statement at 8.

and an artificial incentive to invest in wireless technologies.²¹ The Commission's "bill & keep" proposal is therefore unsound from an economic perspective. By contrast, the Act follows sound economic principles by ensuring the "mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier"²² regardless of the carrier's technology.

B. "Bill & Keep" Would Constitute An Unconstitutional Taking If The Local Exchange Carrier Did Not Receive Appropriate Compensation

As explained above, the Commission's "bill & keep" proposal sets a rate that is clearly below the cost of providing interconnection services. Without adequate compensation, the Commission's proposal would be an unconstitutional taking of LEC property.²³ The Commission implicitly acknowledged this principle when it stated that "a bill and keep requirement would not deprive either LECs or CMRS providers of a reasonable opportunity to recover costs they incurred to terminate traffic from the other's network, because these costs could be recovered from their own subscribers."²⁴

The Commission's "bill & keep" proposal, however, does not provide any assurance that LECs will be able to recover their costs from their subscribers. Does the

²¹ Crandall Statement at 9.

²² Section 252(d)(2)(A)(i).

²³ Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922). The Commission has held that a LEC is not required to provide non-compensatory interconnection to a wireless carrier. See Rogers Radio Communications Service v. FCC, 751 F.2d 408 (D.C. Cir. 1985).

²⁴ NPRM at ¶ 62.

Commission intend to treat “bill & keep” interconnection arrangements as exogenous events and make appropriate adjustments to LEC price cap indices? Alternatively, does the Commission expect LECs to recover their costs of completing CMRS calls by charging landline subscribers when they receive them? The NPRM is completely silent on the issue.

More troubling is the Commission’s proposal to mandate “bill & keep” for intrastate CMRS traffic, which accounts for nearly 85 percent of the traffic Bell Atlantic completes for CMRS providers. Although the NPRM suggests the Commission has the authority to preempt state jurisdiction over interconnection rates, it does not suggest that its authority extends to the recovery of LEC intrastate interconnection costs through any other intrastate rates. Absent an opportunity to recover both interstate and intrastate interconnection costs, the Commission’s “bill & keep” proposal would effect an unconstitutional taking.

III. THERE IS NO BASIS FOR CHANGING THE COMMISSION’S CURRENT POLICY ON INTERCONNECTION ARRANGEMENTS BETWEEN LOCAL EXCHANGE CARRIERS AND CMRS PROVIDERS

The Commission’s proposal to mandate “bill & keep” interconnection arrangements on an interim basis is a solution in search of a problem. Bell Atlantic has interconnected with cellular carriers for more than 10 years and has recently interconnected with a PCS carrier. CMRS providers have enjoyed remarkable success under current arrangements and these arrangements will become even more favorable to CMRS providers under the Act. No CMRS provider has filed a formal complaint before the Commission challenging interconnection arrangements with Bell Atlantic. There is

therefore no basis for the Commission to change current interconnection arrangements or its current policies.

CMRS Competition with LEC Services. The NPRM suggests that the Commission's "bill & keep" proposal is necessary to "ensure the continued development of wireless services as a potential competitor to LEC services" ²⁵ While the NPRM offers no evidence that current interconnection arrangements are hindering development of wireless services as competitors for local wireline services, the Commission has elsewhere found that cellular services are growing at phenomenal rates and becoming more competitive with landline services.

In its most recent Annual Report on CMRS Competition, the Commission found that since 1988, cellular subscriber growth has averaged 53 percent and that since 1984 "[e]ach year, cellular subscriber growth has approached or exceeded fifty percent -- an amazing record of sustained growth." ²⁶ It estimated that "[c]ellular service is expected to reach twenty percent penetration, or approximately 54 million customers, by the year 2000." ²⁷

²⁵ NPRM at ¶ 3.

²⁶ Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, FCC 95-317 at ¶ 13 (rel. Aug. 15, 1995) (footnote omitted) ("Annual Report on CMRS Competition").

²⁷ Implementation of Sections 3(n) and 332 of the Communications Act; Regulatory Treatment of Mobile Services; Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band; Amendment of Parts 2 and 90 of the Commission's Rules To Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and 935-940 MHz Band Allotted to the Specialized Mobile Radio Pool, Third Report & Order, 9 FCC Rcd 7988, 8017-8 (1994).

By contrast, landline subscriber growth from 1988 to 1994 has averaged 3.5 percent.²⁸

The Commission also found that “cellular service prices have been decreasing, partly in anticipation of the arrival of PCS” and “expects cellular prices to continue to decline.”²⁹ These findings by the Commission itself demonstrate that current interconnection arrangements have facilitated -- rather than hindered -- the development of wireless telecommunications services.

Changing these arrangements, however, will not make broadband CMRS more competitive with LEC services. Under current interconnection arrangements, Bell Atlantic collects approximately 1.5 cents per minute for completing interstate cellular and PCS calls.³⁰ By contrast, CMRS providers in Bell Atlantic’s top markets charge an average retail rate of 48 cents per minute.³¹ Even if Bell Atlantic’s interconnection rate were reduced to zero (as under the Commission’s “bill & keep” proposal) and that rate reduction were flowed through entirely, CMRS retail rates would only be about 3 percent lower. This insignificant rate reduction would not make wireless service competitive with landline service. The Commission itself found “that wireless telephone service

²⁸ FCC, Statistics of Communications Common Carriers, “Total Presubscribed lines for all Local Exchange Companies . . .” (1988-1995 ed.).

²⁹ Annual Report on CMRS Competition at ¶ 24 (footnote omitted).

³⁰ See Attachment 1.

³¹ See Attachment 2.

prices will have to fall well over **fifty percent** (or that wireline prices will have to rise to meet them) for wireless service to be fully price-competitive with traditional wireline telephone service.”³²

Market Entry. Another justification offered by the NPRM is that “a LEC **may** attempt to restrict the entry of potential competitors.”³³ The NPRM, however, cites no evidence of CMRS providers that have been unable to enter the market under existing interconnection arrangements. In fact, the only barrier to entry for CMRS providers was the scarcity of spectrum.

The Commission carefully examined the potential of entry by new competitors in its Annual Report on CMRS Competition and did not even mention existing interconnection arrangements as a potential barrier to entry. Instead, the Commission concluded that it “expects long term allocations [of spectrum] to permit relatively free entry into and exit from any segment of CMRS, placing further competitive pressures on existing CMRS providers.”³⁴ This conclusion is borne out by the fact that bidding in the auctions for PCS spectrum has already surpassed \$15 billion.³⁵ These entrepreneurs

³² Annual Report on CMRS Competition at ¶ 75 (emphasis added, footnote omitted).

³³ NPRM at ¶ 12 (emphasis added.)

³⁴ Annual Report on CMRS Competition at ¶ 83.

³⁵ The Commission’s A and B block auctions raised nearly \$7.7 billion. FCC Public Notice No. 52746 (rel. March 13, 1995). Bidding in the C block auction now exceeds \$7.5 billion. FCC Auctions Division Database, March 4, 1996, *available at* [ftp://ftp.fcc.gov/pub/Auctions/pcs/Broadband/BTA/Results/Summary 15_cursum.gif](ftp://ftp.fcc.gov/pub/Auctions/pcs/Broadband/BTA/Results/Summary%2015_cursum.gif) (citing a net revenue of \$7,648,232,750).

obviously do not view current interconnections arrangements to be a barrier to entry in this lucrative market.

Collusion. The last rationale offered in the NPRM is that “a LEC and an interconnecting CMRS provider **may** have the incentive and the ability to engage in collusive behavior” and that “[i]t **may** be particularly likely that such collusive behavior could occur in cases where the CMRS provider is an affiliate of the LEC.”³⁶ Again, the NPRM offers no supporting evidence and the speculation itself is inconsistent with the Commission’s own findings in another proceeding.

When the Commission established rules for PCS, it considered whether LECs should be allowed to obtain PCS licenses in their service areas.³⁷ Several parties argued against allowing LECs to hold PCS licenses, claiming that “LECs have the market power and incentive to block development of competitive PCS services.”³⁸ The Commission properly rejected these arguments and “conclude[d], based on the record, that the cellular-PCS policies described above are adequate to ensure that LECs do not behave in an anticompetitive manner.”³⁹ These findings were upheld on appeal.⁴⁰ Nothing has happened during the intervening period to warrant changing the Commission’s conclusion or policy.

³⁶ NPRM at ¶13 (emphasis added).

³⁷ Amendment of the Commission’s Rules to Establish New Personal Communications Services, 8 FCC Rcd 7700, 7747-8 ¶ 112-14 (1993).

³⁸ 8 FCC Rcd at 7751, ¶ 124.

³⁹ 8 FCC Rcd at 7551, ¶ 126.

⁴⁰ Cincinnati Bell Tel. Co. v. FCC, 69 F.3d 752 (6th Cir 1995).

IV. THE COMMISSION SHOULD DISCONTINUE THIS DOCKET

The Commission issued this NPRM while Congress was still considering landmark legislation to reform the Communications Act of 1934. Congress has now concluded its deliberations and enacted the Telecommunications Act of 1996. This legislation addresses most of the issues raised in the NPRM. The Commission should therefore close this docket and initiate a rulemaking to implement the interconnection provisions of Section 251.

The Issues Raised In This NPRM Have Largely Been Resolved By The Telecommunications Act of 1996

The principal focus of this NPRM was the Commission's proposal to prescribe "bill & keep" for all LEC-CMRS interconnection arrangements. As explained above, the Commission's proposal is inconsistent with the new legislative scheme of negotiated interconnection arrangements subject to state commission approval. There is no longer any need to consider the Commission's "bill & keep" proposal.

The Act also addresses other issues raised in the NPRM and eliminates the need for any further consideration of them. For example, the NPRM solicits comments on the Commission's intervention in interconnection negotiations and the need for filing interconnection agreements with the Commission. The Act resolves these issues by authorizing state commissions to mediate and arbitrate interconnection negotiations and by requiring them to review all interconnection agreements under the statutory standards and to make all approved interconnection agreements available for public inspection.⁴¹

⁴¹ Section 252(a)(2), (b), (e), and (h).

Likewise, the NPRM solicits comments on whether the Commission should preempt state authority over interconnection arrangements.⁴² Again, the Act resolves this issue by specifying that the Commission is authorized to preempt “[i]f a State commission fails to act to carry out its responsibility under this section [252] in any proceeding or other matter under this section [252]. . . .”⁴³ There is therefore no reason to continue this docket to consider the issues raised in the NPRM.

The Commission Should Promptly Initiate A Rulemaking To Implement
The Interconnections Provisions Of The Act

The Act requires the Commission to promulgate regulations to implement its interconnection provisions by August 8, 1996. The Commission should promptly institute a rulemaking to meet this obligation. Any issues raised in the instant NPRM that still need to be resolved in light of the new legislation can be addressed in this new proceeding.

In developing regulations to implement the interconnection provisions of Section 251, the Commission should preserve the flexibility of the parties to negotiate a wide range of interconnection alternatives. As the Commission noted in its NPRM, interconnection policies should “enable LECs and CMRS carriers to respond rapidly and flexibly to changing interconnection needs.”⁴⁴ The Commission therefore should not

⁴² NPRM at ¶ 107-114.

⁴³ Section 252(e)(5).

⁴⁴ NPRM at ¶ 89.

propose detailed regulations that impose rigid requirements on interconnection arrangements.

The Commission's proposed rules should also provide for the appropriate recovery of interconnecting carriers' costs. As the Commission noted, interconnection arrangements should "not deprive either LECs or CMRS providers of a reasonable opportunity to recover costs they incurred to terminate traffic from the other's network"⁴⁵ and that "these costs could be recovered from their own subscribers."⁴⁶ In addition, interconnecting carriers should have a reasonable opportunity to recover any new or additional costs for completing calls on another carrier's network. These principles should be embodied in the Commission's interconnection rules.

CONCLUSION

There is no reason for the Commission to give further consideration to its "bill & keep" proposal. The Telecommunications Act of 1996 requires LECs to negotiate interconnection agreements with telecommunications carriers, including CMRS providers, and to submit them to state commissions for approval.

The Commission's "bill & keep" proposal would also violate fundamental economic principles by forcing LECs to complete CMRS calls at no charge. This would be economically inefficient and would distort both purchasing and investment decisions.

⁴⁵ NPRM at ¶ 62.

⁴⁶ Id.

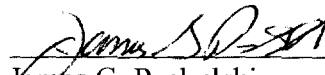
The Commission's proposal to implement "bill & keep" even on an interim basis is completely unjustified. The cellular industry has developed at remarkable rates under current interconnection arrangements. Changing them will not make wireless services more competitive with landline services because current interconnection rates are only an insignificant fraction of retail wireless rates.

There is therefore no reason for the Commission to continue this docket. The Commission should instead promptly initiate the broader interconnection rulemaking mandated by the Section 251(d) of the Act.

Respectfully submitted,

The Bell Atlantic Telephone Companies

By their Attorney


James G. Pachulski
1320 North Court House Road
Eighth Floor
Arlington, Virginia 22201
(703) 974-2804

Edward D. Young III
Of Counsel

Dated: March 4, 1996

Bell Atlantic's Interconnection Arrangements with CMRS Providers

Bell Atlantic has been interconnecting with CMRS providers for more than 10 years. Bell Atlantic's current interconnection arrangements with broadband CMRS providers are governed by negotiated contracts. None of them are tariffed at either the state or federal level.

Last year, Bell Atlantic completed about 2 billion minutes of traffic on behalf of broadband CMRS providers. This represents approximately 85 percent of the traffic Bell Atlantic interchanged with these carriers. The remaining 15 percent represents calls from Bell Atlantic's subscribers to CMRS customers.

Bell Atlantic's interconnection contracts apply access tariff rates for the functionally equivalent interconnection services provided to CMRS providers. For example, switching a call from a landline interexchange carrier involves the same services and facilities as switching a call from a CMRS provider. To avoid claims of discrimination, Bell Atlantic charges the same rate to interexchange carriers, independent telephone companies and CMRS providers for the functionally equivalent switching services.

Based upon reports from CMRS carriers, approximately 15 percent of their traffic is jurisdictionally interstate and the remaining 85 percent is intrastate. Bell Atlantic applies interstate tariff rate equivalents to the interstate traffic and intrastate tariff rate equivalents to the intrastate traffic. Bell Atlantic collects about 1.5 cents for each minute of interstate traffic completed on behalf of CMRS providers, and about 2.2 cents per minute for all CMRS traffic (both interstate and intrastate).

Cellular Prices for 160 Minutes in Top Bell Atlantic Markets

MSA	Population	1994 Price
Philadelphia	4,856,881	\$80.98
Washington, DC	3,660,758	76.89
Baltimore	2,348,219	76.89
Pittsburgh	2,097,447	69.87
Average @160 minutes		\$76.16
Average per minute		\$0.48

Source: Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, FCC 95-317, Table 8 (released August 15, 1995).

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the matter of)	
)	
Interconnection Between Local Exchange)	CC Docket No. 95-185
Carriers and Commercial Mobile Radio)	
Service Providers)	
)	
Equal Access and Interconnection)	
Obligations Pertaining to Commercial)	
Mobile Radio Service Providers)	

Statement of Robert W. Crandall¹ on Interconnection Policies for CMRS

I, Robert W. Crandall, state the following:

In its Notice of Proposed Rulemaking in CC Dockets 95-185 and 94-54, issued January 11, 1996, the Commission has raised a large number of policy issues involving interconnection of CMRS systems with local-exchange carriers (LECs). These issues are common to all interconnection arrangements among telecommunications systems, including those between LECs and other wire-based systems and even among CMRS systems themselves. As a result, the Commission should not resolve these issues in isolation, but rather should address the appropriate structure of all interconnection arrangements. Indeed, given the federal and state regulation of most LEC services, these issues cannot even be separated from policy considerations involving the overall structure of LEC rates.²

¹ Senior Fellow, The Brookings Institution. The views expressed herein are solely those of the author and should not be construed to represent the views of the Brookings Institution, its other staff members, or its Trustees.

² I do not address the effect of the new Telecommunications Act of 1996 on interconnection policy or on the rate structure of regulated LECs, although Section 251 appears to incorporate the issues raised in this proceeding.

In these comments, I demonstrate that the Commission's proposal for a transitional system of "bill-and-keep" CMRS-LEC interconnection arrangements both is inefficient in the short run and will reduce incentives for entry into local telecommunications markets. In addition, a bill-and-keep requirement generates losses in interconnection services for the LECs that must be recouped from other service rates, given that most LEC services are regulated by the Commission or state authorities. The Commission is silent on how these revenue deficiencies are to be recovered. The more critical problem, however, is that even if the recoupment issue is resolved, bill and keep will reduce social welfare by creating incentives that lead to distorted and inefficient entry, investment and consumption decisions.

Interconnection in a Regulated Industry

The Commission appears to be concerned that interconnection arrangements between CMRS systems and LECs are crucial to the development of wireless competitors to the local loop. It is therefore evidently inclined to adopt an "interim" approach to interconnection compensation that would encourage the development of new CMRS systems, particularly PCS. It tentatively concludes that a bill-and-keep rule might be the simplest approach to providing such a short-term stimulus. Bill-and-keep is a system that allows each carrier to bill its customers who originate calls that are terminated on another carrier's network and to retain all of the call revenues. In other words, each originating carrier pays zero compensation to the carrier terminating the calls -- it "bills" and "keeps" all resulting revenues from the calls. As I show below, the Commission's proposal amounts to a policy conclusion

that the LECs and their subscribers should subsidize the development of PCS or of other new wireless technologies in order to accelerate local-loop competition.

Whether such a subsidy is indeed in the public interest is a matter that requires considerable analysis. More important, however, is the necessity to recognize that the rates charged by LECs for most services are still subject to regulation by either the States or the Commission. Implicit in such regulation is the obligation of regulators to allow these carriers to recover their investments, either through rate caps with an appropriate productivity offset or through cost-based regulation where employed by the States. Regulators must allow the regulated LECs to recover their embedded costs if these costs are shown to be prudent. If interconnection rates are to be lowered substantially from current levels for cellular services or set below long-run incremental cost (LRIC) for new services, other rates will have to be adjusted for the LECs to be able to continue to recover their total embedded costs. Most of these compensating adjustments may have to occur in service rates regulated at the state level. Unless the Commission is willing to increase the subscriber line charge or otherwise mandate fees to replace the revenues sacrificed in lowering current interconnection (access) charges, it cannot help to overcome the revenue losses caused by bill and keep.

The Telecommunications Act of 1996 contains provisions for the maintenance of universal-service subsidies. In general, these subsidies are directed at defraying the costs of connecting residential subscribers, particularly those in lightly-populated areas, to the network at rates that are below LRIC. These subsidies have traditionally been recouped from charges

for long-distance connections and other services. If current interconnection charges for CMRS services provide some of the revenues for these subsidies or the "contributions" to fixed network costs,³ the Commission must investigate the effects of any changes in these interconnection rates on the ability of the LECs to continue to cover the costs of these universal-service obligations.

In short, as long as rates are regulated at the federal and state levels, regulators -- including the Commission -- must be concerned with the overall effect of the entire rate structure on economic efficiency and the achievement of other goals. The structure and level of the specific interconnection rates between CMRS and LECs cannot be evaluated except in the context of this overall rate structure.

Efficient Pricing

The structure of a regulated LEC's tariffs should be based at least in part on the economic theory of efficient pricing. Ideally, all rates should be set at the carrier's long-run incremental costs to maximize social welfare. If the carrier operates in the range of increasing returns to scale, however, the rates set at LRIC will not cover total costs. Under these conditions, the most efficient rate structure achievable is the second-best "Ramsey pricing" solution, in which the best achievable rates include markups over LRIC that vary

³ The term "subsidy" has a very precise meaning in modern economic literature. A service is said to be subsidized if its price does not cover the service-specific incremental cost of adding it to the firm's other service offerings. Prices may therefore be subsidy-free and not be sufficient to cover total costs. Prices that cover more than the service-specific incremental costs are thus said to "contribute" to the fixed (network) costs.

according to demand for each good or service being priced.⁴ As is by now quite familiar to all regulators, Ramsey pricing requires these markups to be inversely related to the price elasticities of demand.⁵ Thus, one must begin any such analysis of the optimal rate structure with estimates of LRIC and the relevant demand elasticity for each service. The efficient charge for an individual good or service cannot be calculated in isolation.

In an industry with rapidly-changing technology and a large amount of joint and common costs, estimates of LRIC are likely to be very difficult to obtain. Forward-looking estimates of these costs are probably obtainable only from engineering estimates of the most modern technology. In his analysis filed in ex parte comments in CC Docket 95-54 on December 8, 1995, Gerald Brock offers some observations on the costs of providing connections based on a study by Bridger Mitchell, then of the RAND Corporation,⁶ and an engineering study performed by New England Telephone. He concludes that these studies point to an "average" incremental cost of local switched access of about 0.2 cents per minute. However, these studies are based on data now about a decade old and should probably be re-evaluated. Moreover, as I discuss below, any analysis of interconnection costs

⁴ For a discussion of Ramsey pricing, see William J. Baumol and David F. Bradford, "Optimal Departures from Marginal-Cost Pricing," American Economic Review, June 1970, pp. 265-83. See also W. Kip Viscusi, John M. Vernon and Joseph E. Harrington, Jr., Economics of Antitrust and Regulation. D.C. Heath, 1992, p. 343.

⁵ This inverse-elasticity rule ensures that contributions to the regulated carrier's costs are coming from charges for those goods for which consumer demand is less sensitive to higher prices, thus minimizing social welfare losses from the markups. The need to utilize relative demand elasticities in calculating markups means that optimal rates for regulated services cannot be calculated in isolation.

⁶ Bridger M. Mitchell, Incremental Costs of Telephone Access and Local Use. The RAND Corporation, 1990. (This analysis is based largely on 1986 data.)

may need to distinguish peak from off-peak costs. The Mitchell study clearly does so, but Brock combines the estimated peak and off-peak costs into one estimate.

Unfortunately, the Commission cannot proceed to set rates based only on the estimates of LRIC of interconnection or switched access even if the estimates at its disposal are reasonably accurate. At very least, it should consider the optimal structure of markups over LRIC (i.e. the Ramsey prices), a consideration that requires estimates of the price elasticities of demand for all of the major services offered by regulated LECs. These elasticity estimates are available from a variety of published and unpublished studies, the most recent of which have been carefully summarized by Professor Lester Taylor.⁷ Whatever these elasticities, however, it is inconceivable that bill-and-keep satisfies the Ramsey criterion because bill-and-keep establishes a zero price, which is clearly below the LRIC for interconnection services.

Bill-and-Keep in the Context of CMRS-LEC Interconnection

Professor Brock points out that bill-and-keep may be justified as an approximation to efficient pricing under either of two conditions: (1) balanced traffic and (2) low incremental costs. Under a bill-and-keep interconnection policy, interconnection rates are simply set at zero. If traffic between any two interconnecting parties is balanced, the disparity between price (zero) and LRIC may seem unimportant because neither party would transfer any monies for interconnection anyway. However, traffic is not always precisely balanced

⁷ Lester D. Taylor, Telecommunications Demand in Theory and Practice. Dordrecht: Kluwer Academic Publishers, 1994.